Application No.: 10/531,066

REMARKS

Claims 5 through 11 and 17 through 19 are now pending in this application. In response to the Office Action dated April 18, 2006, claims 1 through 4 and 12 through 16 have been cancelled and the specification and claims 5 through 10 and 17 through 19 have been amended. Care has been taken to avoid adding new matter. Favorable reconsideration of the application is respectfully solicited.

Claims 1 through 3, 9, 10, 12, 13, 16 and 17 were rejected under 35 U.S.C. § 102(b) as being anticipated by JP 10-029837 (Furukawa). Claims 1 through 3, 12, 13, 16 and 17 were further rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. patent 5,125,980 (Schotter). Claims 4 through 8, 11, 14, 15, 18 and 19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Furukawa. In response to these rejections, claims 1 through 4 and 12 through 16 have been cancelled and claims 5, 6, 8 through 10 and 17 through 19 have been amended. The rejections, to the extent that they may be considered with respect to the remaining claims as amended, are respectfully traversed.

The claims as now amended are directed to an invention corresponding to the disclosure of Figs. 8A to 8C and the description thereof in the specification beginning at page 22. Although the optical fiber 20 is moved along a predetermined path line at a predetermined tension in a steady condition, the path line may change due, for example, to variations of linear tension of the optical fiber. Such variations can cause the fiber to move in directions perpendicular to the path as well advancing in the linear direction. If the cleaning member 11 is fixed, contact with the outer periphery of the optical fiber 20 will not be uniform, resulting in incomplete removal of foreign material from the surface of the foreign material. In the present invention, as illustrated in Figs. 8B and 8C, the holding position of the cleaning member 11 can be adjusted by

Application No.: 10/531,066

controlling the supporting arm 14 in an upward or downward direction or left or right direction so that the contact condition between the cleaning member 11 and the optical fiber 20 at the optical fiber insertion portion H is kept at a steady contact condition even if the path line changes.

As illustrated in Fig. 8C, a soft and flexible member is used for the cleaning member 11 and is mounted on the mounting head 15 in such a manner that it is slack. The optical fiber 20 is in a frictional contact with the cleaning member 11 at the optical fiber insertion portion H.

Accordingly, if the cleaning member 11 is formed of a soft and flexible member such as rubber, the optical fiber insertion portion H of the cleaning member 11 is shifted in an optical fiber moving direction due to the friction between the optical fiber and the member 11 caused by the movement of the optical fiber. The cleaning member 11 is allowed to slightly move in a radial direction due to the flexibility of the cleaning member 11. As a result, the contact condition between the optical fiber 20 and the cleaning member 11 at the optical fiber insertion portion H is kept in a steady state, so that uniform wiping can be maintained.

Now independent claim 5 contains the requirements of now cancelled claims 1, 2 and 4 with additional requirements. Claim 5 recites a cleaning method performed with the use of the cleaning member comprising the soft and flexible fiber sheet appropriate for the movement in directions perpendicular to the optical path direction. New independent claim 17 contains the requirements of now cancelled claim 1 with further refinement. Claim 17 recites apparatus including a cleaning member that is movable depending on a position of the movement in directions perpendicular to the optical path direction for the fiber.

It is submitted that neither Furakawa nor Shotter teach these claimed requirements, nor would a person of ordinary skill in the art have been led to the claimed subject matter from a

Error! No text of specified style in document.

consideration of their teachings in combination. The cleaning methods of the references are both disclosed with respect to movement of the optical fiber along the path in a normal manner without variational movement in directions perpendicular thereto.

Accordingly, it is submitted that independent claims 5 and 17, and their dependent claims 6 through 11, 18 and 19 are patentably distinguishable. Withdrawal of the rejections and allowance of the application are respectfully solicited. To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

McDERMOTT WILL & EMERY LLP

3. Rubium

Please recognize our Customer No. 20277

as our correspondence address.

Gene Z. Rubinson

Registration No. 33,351

600 13th Street, N.W. Washington, DC 20005-3096 Phone: 202.756.8000 GZR:lnm

Facsimile: 202.756.8087

Date: July 18, 2006